Standard 1.0 - Define and Refine Problem or Question: Students will be able to follow an inquiry process to define a problem, formulate questions, and refine either or both to meet a personal and/or assigned information need. (AASL 21st 1)

Topic 1A. Follow an Inquiry Process

Objectives: The student will be able to:
1. Independently follow an inquiry process and apply the process to real life.
   a. Follow an inquiry process for an assigned information need.
   b. Apply the inquiry process to a personal information need.

Topic 1B. Define a Problem, Formulate Questions, and Refine a Problem and/or Question

Objectives: The student will be able to:
1. Independently identify an assigned or personal information need.
   a. Identify an assigned information need.
   b. Identify a personal information need.
2. Determine the scope of the information need.
   a. Independently create and use criteria to determine the scope of an information need.
3. Independently and collaboratively formulate and refine effective questions.
   a. Use prior knowledge to develop researchable questions.
   b. Use background information to refine researchable questions.
Standard 2.0 - Locate and Evaluate Resources and Sources: Students will be able to follow an inquiry process to identify, locate, evaluate, and select resources and sources in a wide variety of formats to meet the information need in an ethical manner. (AASL 21st 1)

Topic 2A. Locate and Evaluate Resources

Objectives: The student will be able to:
1. Independently and collaboratively identify resources to meet the information need.
   a. Identify and explore human, print, online, and multimedia resources.
   b. Select resources based on subject, advantages and disadvantages of various formats, availability and ease of access, and the information need.
   c. Refine or revise researchable questions based on access to and availability of resources.

2. Use safe practices when online.
   a. Identify and follow the district’s Acceptable Use Policy and school-based computer use rules.
   b. Apply safe practices for both assignment-related and personal online searches.

Topic 2B. Locate and Evaluate Sources

Objectives: The student will be able to:
1. Independently and ethically locate sources to meet the information need.
   a. Apply knowledge of catalogs, call numbers, pathfinders, links, and organizational structures (search strategies unique to various search engines and databases) to locate relevant sources.
   b. Choose a citation style appropriate to the subject for a preliminary source list.
   c. Select and record potential sources of print, online and multimedia resources and their locations.

2. Independently and collaboratively evaluate sources to meet the information need in an ethical manner.
   a. Evaluate sources based on currency, authority, reliability, bias, relevance, authorship, purpose, and audience to select sources that best meet the information need.
   b. Select and use text features, background knowledge, keywords and key ideas to select sources that meet the information need.
   c. Defend selected sources.
Standard 3.0 - Find, Generate, Record, and Organize Data/Information:
Students will be able to follow an inquiry process to find, generate, record,
and organize information relevant to the information need in an ethical
manner. (AASL 21st 1)

Topic 3A. Find Data/Information within a Variety of Sources

Objectives: The student will be able to:
1. Collaboratively and independently use specific sources to find
information.
   a. Generate and use effective search terms and strategies to find information
      within a specific source and defend choices.
   b. Use technology tools to find data/information within a specific source.

2. Evaluate the relevance of information within a specific source to meet the
   information need.
   a. Differentiate between fact and opinion within a specific source.
   b. Confirm that the data/information found within a specific source matches the
      information need.

Topic 3B. Generate New Data/Information in an Ethical Manner

Objectives: The student will be able to:
1. Collaboratively and independently generate new data/information from
   observations, interviews, and/or surveys.
   a. Generate effective criteria for observations and questions for interviews and
      surveys.
   b. Generate information in an appropriate format (e.g., video or audio recording,
      notes, table, spreadsheet, graphic organizer, and other digital formats).
   c. Exhibit intellectual integrity and ethical behavior in generating information.

Topic 3C. Record and Organize Data/Information

Objectives: The student will be able to:
1. Collaboratively and independently record data/information in a variety of
   appropriate formats.
   a. Add any new sources to the existing source list.
   b. Select and apply appropriate strategies for organizing data/information (e.g.,
      alphabetical; chronological; part to whole; general to specific; main idea and
      supporting details; compare/contrast; cause and effect; categorizing; data
      table, tags, and clusters).
   c. Defend a format for organizing data/information.
   d. Record only succinct and relevant information.
   e. Avoid plagiarism by correctly recording direct quotations, complete graphs,
      charts, and images, and keeping track of sources used.
Avoid plagiarism by correctly citing information sources about each piece of data/information.

Use technology to record and organize data/information.

2. **Use an appropriate and accepted citation style to create a source list.**  
   a. Explain the purpose of giving credit to sources of information.  
   b. Independently and accurately give credit to sources of information.  
   c. Use all the features of a citation generator to create a source list.

3. **Revisit the information need.**  
   a. Reflect upon and revise or refine research questions, theses, hypotheses, or positions based on new information discovered in the inquiry process.
Standard 4.0 - Interpret Recorded Data/Information: Students will be able to follow an inquiry process to interpret recorded data/information to create new understandings and knowledge related to the information need in an ethical manner. (AASL 21st 2)

Topic 4A. Interpret Recorded Data/Information

Objectives: The student will be able to:

1. Independently and collaboratively evaluate and analyze recorded data/information to meet the information need.
   a. Assess recorded information against prior knowledge and make personal connections.
   b. Evaluate and analyze recorded data/information for relevance, completeness, accuracy, and discrepancies.
   c. Analyze recorded information to ensure that each section of the information product will contain data/information from multiple sources.
   d. Find and record missing or additional data/information.

2. Independently and collaboratively apply critical thinking skills and problem-solving strategies to the recorded data/information to meet the information need.
   a. Verify the validity and accuracy of the recorded data/information regardless of its source.
   b. Ethically and accurately summarize, paraphrase, and/or manipulate the recorded data/information.
   c. Identify bias within the recorded data/information.
   d. Identify how the recorded data/information can be crafted to express an idea or draw a conclusion.
   e. Identify and analyze patterns to categorize the recorded data/information.
   f. Make inferences using recorded data/information from multiple sources.
   g. Use technology to support critical thinking skills and problem-solving strategies to meet the information need.

3. Apply ethical practices to the evaluation and analysis of the recorded data/information.
   a. Practice digital citizenship and observe intellectual property rights.
   b. Avoid plagiarism by citing all summarized, paraphrased, and/or manipulated recorded data/information.
   c. Identify multicultural, alternative, and diverse perspectives and interpretations applicable to the recorded data/information.
Topic 4B. Create New Understandings and Knowledge

Objectives: The student will be able to:

1. From the recorded data/information, ethically create new understandings and knowledge related to the information need.
   a. Synthesize recorded data/information from multiple sources.
   b. Draw conclusions from the recorded data/information to create and articulate new understandings.
   c. Reflect on and/or revise the researchable question/hypothesis or thesis to reflect research findings.
   d. Prioritize recorded data/information to build a hierarchy.
   e. Defend conclusions and recognize divergent thinking.
Standard 5.0 - Share Findings/Conclusions: Students will be able to follow an inquiry process to share findings/conclusions in an appropriate format to support written, oral, and multimedia information products and evaluate the products and the processes in an ethical manner.

Topic 5A. Share Findings/Conclusions

Objectives: The student will be able to:

1. Individually and collaboratively use a variety of formats to prepare the findings/conclusions of the information need for sharing.
   a. Organize and display findings/conclusions in a variety of formats, including the use of technology.
   b. Design the presentation format and delivery for intended and/or diverse audiences.
   c. Apply appropriate design criteria, which includes universal design principles, to the content and layout of the information product.
   d. Use technology to present findings/conclusions in a variety of formats.
   e. Edit/review/revise and, when appropriate, practice the presentation of, the information product.
   f. Apply fair use, copyright laws, and Creative Commons attributions.
   g. Identify and apply conventions distinct to a subject area and product format.

2. Individually, collaboratively, and responsibly share findings/conclusions.
   a. Contribute to a learning community.
   b. Practice digital etiquette when sharing findings and conclusions.
   c. Credit sources using an appropriate citation format as part of the information product.

Topic 5B. Evaluate the Product and the Process

Objectives: The student will be able to:

1. Evaluate the inquiry process and the information product.
   a. Create and apply criteria for evaluating the information product.
   b. Use audience feedback and/or peer review to reflect on the information product.
   c. Reflect on the information need, new knowledge, and the need for additional information.
   d. Reflect on the inquiry process and how to use it more effectively and efficiently.
Standard 6.0 - Appreciate Literature and Life-long Learning: Students will be able to demonstrate an appreciation of literature and multimedia as a reflection of human experience and use the inquiry process for life-long learning. (AASL 21st 4)

Topic 6A. Appreciate Literature and Multimedia

Objectives: The student will be able to:
1. Collaboratively and independently identify relationships within literature and/or between fiction and nonfiction and real life.
   a. Read, listen to, view, and discuss literature that reflects personal interests, provides imagined experiences, and validates individual concerns and real experiences.
   b. Analyze literature-to-self, literature-to-literature, literature-to-multimedia, and literature-to-world connections.
   c. Read, listen to, view, and integrate information from nonfiction literature to enhance comprehension of fiction literature.
   d. Use literature to answer questions, make decisions, or solve problems.
   e. Use literature to evaluate historical problems, current social events, and personal decisions.
   f. Establish criteria with which to critique or evaluate literature.

2. Select literature and/or multimedia from the media center and other libraries for a personal and/or assigned need.
   a. Follow circulation procedures and policies in the media center and other libraries.
   b. Locate and select literature and/or multimedia in a variety of genres.

Topic 6B. Demonstrate Life-long Learning Practices

Objectives: The student will be able to:
1. Connect literature and multimedia to learning.
   a. Explain the connection between reading, listening to, and viewing literature and/or multimedia and being successful in personal and academic pursuits/endeavors.
   b. Defend literature and/or multimedia choices.
   c. Explain why intellectual freedom is important and how it can be preserved.
   d. Contribute to a learning community.
   e. Adopt new technology or methodology to expand personal and academic pursuits/endeavors.